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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/621,474

07/17/2003

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EXAMINER

ROSE, HELENE ROBERTA

ART UNIT

PAPER NUMBER

2163

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/621,474	<b>Applicant(s)</b> NOMIYAMA ET AL.	
	<b>Examiner</b> Helene R. Rose	<b>Art Unit</b> 2163	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2 July 2003</u> . | 6) <input type="checkbox"/> Other: _____  |

**Detailed Action**

1. Claims 1-14 have been presented for examination.
2. Claims 1-14 have been rejected.

**Information Disclosure Statement**

3. The information disclosure statement filed 7/17/2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

**Claim Rejections – 35 U.S.C 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa et al (US Patent No. 5848,407, hereinafter Ishikawa).

**Claim 1:**

Regarding claim 1, Ishikawa teaches an information search system for crawling a web site via a network (see Figures 2 and 3, all features, and column 8, lines 11-18, wherein a web robot is also known as a Web Spider, it is a program that traverses the

Internet automatically by retrieving a document, and recursively retrieving all documents that are referenced, Ishikawa), comprising:

structure analyzing means for analyzing a structure of source code in a prescribed web page (column 8, lines 19-28, wherein the plurality of hypertext documents are indicated as a plurality of parent documents by the universal resource locator on after another, one or more anchor sentences written in each of parent documents are analyzed, and column 9, lines 25-30 Ishikawa);

significance calculating means for calculating a degree of significance of a web site linking from said prescribed web page, based on an analysis result of said structure analyzing means (column 10, lines 18-26, Ishikawa); and

crawling means for crawling the web site depending on the degree of significance calculated by said significance calculating means (column 4, lines 35-40, Ishikawa).

Claim 2 and 11:

Regarding claims 2 and 11, Ishikawa teaches wherein said structure analyzing means associates mutually relevant information elements with each other, among information elements contained in said source code (see Figure 4, wherein word list is the relevant information elements and text body is the information elements contained in source code, and source code is considered to be taking into account the prescribed web page, and column 9, lines 4-16, Ishikawa).

Claim 3:

Regarding claim 3, Ishikawa teaches wherein said significance calculating means calculates the degree of significance of said web site selectively using a strategy that is for calculating the degree of significance of said web site, from among strategies that are

provided in advance (column 4, lines 22-39, wherein one importance degree of one unified hypertext document is calculated as one importance degree of one particular hypertext document, and wherein selecting the specific hypertext documents in an appropriate importance degree order even though the specific hypertext documents are written in the hypertext markup language in world wide web, Ishikawa).

Claims 4 and 12:

Regarding claims 4 and 12, Ishikawa teaches wherein said significance calculating means selects plural strategies as strategies for calculating the degree of significance of (column 10, lines 50-61, wherein selecting a plurality of candidates for a key word, Ishikawa) said web site (column 10, lines 41-46, wherein the user calls the HTML document in the world wide web, Ishikawa), and uses them by giving weights thereto, respectively (column 11, lines 47-65, wherein weights are assigned he number of keywords is two or more, it is applicable that an estimated value for one particular hypertext document be set to a value N times (N is two or more) as high as a sum of the products  $TF \cdot IDF$  calculated for all keywords when N particular words agreeing with N keywords appear in the particular hypertext document and . where two particular words agreeing with two keywords are used in one particular hypertext document close to each other within 20 characters, it is applicable that an estimated value for the unified particular hypertext document be doubled, Ishikawa).

Claim 5:

Regarding claim 5, Ishikawa teaches an information search system comprising:  
document structure analyzing means for analyzing a document structure of an HTML document (columns 6-7, lines 60-67 and 1-7, wherein analyzing the hypertext documents having the reference relationships and anchor sentences of the parent documents are listed with one hypertext document identifier identifying, Ishikawa, and wherein adding an information element acquired by the analysis to a corresponding anchor summing a plurality of products for all particular words to produce a summed product as an estimated value for each unified particular hypertext document, determining a plurality of importance degrees of the unified particular hypertext documents according to the estimated values, determining the ranking of the particular hypertext documents, Ishikawa) ; and

crawling means for crawling a web site linking from said anchor (column 23, lines 9-15, Ishikawa), depending on a degree of significance of said anchor calculated based on said information element acquired through the analysis of said document structure analyzing means (column 23, lines 35-45, Ishikawa).

Claim 6:

Regarding claim 6, Ishikawa teaches wherein said document structure analyzing means groups respective information elements forming said HTML document into blocks each unified in terms of a meaning of said information elements (column 20, lines 58-67, wherein group of indexes of the particular documents with summaries of the hypertext documents and wherein blocks of keywords are formed, Ishikawa), and adds the information element in each block to an anchor in the same block as additional information (column 21, lines 9-19, Ishikawa).

Claim 7:

Regarding claim 7, Ishikawa teaches an information search system according to claim 5, further comprising significance calculating means for calculating a degree of significance of said anchor based on said information element acquired through the analysis of said document structure analyzing means (column 16, lines 2-23, Ishikawa) and according to a pre-selected prescribed strategy (column 15, lines 9-23, wherein D83 of the fourth rank is called and read, Ishikawa), wherein said crawling means crawls the web site depending on the degree of significance of said anchor calculated by said significance calculating means (column 4, lines 35-40, Ishikawa)..

Claim 8:

Regarding claim 8, Ishikawa teaches an information search method for crawling a web site via a network using a computer, said method comprising the steps of:

acquiring a web page as initial information and storing source code into a storage device (see Figure 4, all features, Ishikawa);

reading the source code of said web page from said storage device (see Figure 4, wherein text body is taking into account to be the source code prescribed in webpage, Ishikawa), conducting a structure analysis of said web page (see Figure 4, wherein parent document list is conducting a structure analysis of web page, Ishikawa) and storing a result of the analysis into said storing device (column 6, lines 31-35, Ishikawa);

calculating a degree of significance of a web site linking from said web page, based on the result of said structure analysis stored in said storage device (see Figure 5, all features and column 10, lines 18-25, Ishikawa); and

accessing the web site depending on the calculated degree of significance to acquire contents thereof (column 3, lines 4-19, Ishikawa), and storing them into said storage device (see Figure 3, diagram 8, wherein hypertext documents stored, Ishikawa).

Claim 9 and 13:

Regarding claims 9 and 13, Ishikawa teaches an HTML document structure analyzing method using a computer, said method comprising the steps of:

reading an HTML document being a processing object from a memory (column 19, lines 4-7, Ishikawa), blocking information elements forming said HTML document based on tags of said HTML document (column 24, lines 39-48, wherein blocking means to block relevant information elements among information elements included in HTML document according to applicants specification, Ishikawa), and storing blocked structural data of said HTML document into the memory (column 24, lines 52-57, Ishikawa); and

reading the blocked structural data of said HTML document from said memory, updating block structures of said HTML document by associating the information elements that are mutually relevant in terms of a meaning (column 17, lines 25-30, wherein a revised occurrence frequency TF for the particular hypertext document for each of the particular hypertext documents, Ishikawa), and storing the updated structural data into the memory (see Figure large volume of hypertext documents stored in the hypertext document managing unit 8 and column 17, lines 17-19, Ishikawa).

Claim 10:

Regarding claim 10, Ishikawa teaches a program product for controlling a computer connected to a network so as to crawl a web site network (see Figures 2 and 3, all features,



and column 8, lines 11-18, wherein a web robot is also known as a Web Spider, it is a program that traverses the Internet automatically by retrieving a document, and recursively retrieving all documents that are referenced, Ishikawa), said program product causing said computer to execute:

a process of acquiring a web page as initial information and storing source code into a storage device (see Figure 4, all features, Ishikawa) ;

a process of reading the source code of said web page from said storage device, (column 10, lines 18-26, Ishikawa) conducting a structure analysis of said web page(see Figure 4, wherein parent document list is conducting a structure analysis of web page, Ishikawa), and storing a result of the analysis into said storing device (see Figure 3, diagram 8, wherein hypertext documents stored, Ishikawa);

a process of calculating a degree of significance of a web site linking from said web page, based on the result of said structure analysis stored in said storage device(see Figure 5, all features and column 10, lines 18-25, Ishikawa); and

a process of accessing the web site depending on the calculated degree of significance to acquire contents thereof (column 3, lines 4-19, Ishikawa), and storing them into said storage device (see Figure 3, diagram 8, wherein hypertext documents stored, Ishikawa).

Claim 14:

Regarding claim 14, Ishikawa teaches wherein, in said second process by said program product (see Figures 7,9, and 12, wherein index of second stage parent document, Irshikawa) said program product causes said computer to execute:

a process of identifying an unnecessary information element in terms of a purpose of a document structure analysis (column 3, lines 20-30, Ishikawa);

a process of deleting a block having no structural meaning (columns 8-9, lines 65-67 and 1-6, Ishikawa); a process of merging said information elements (columns 9-10, lines 65-67 and lines 1-3, respectively, Ishikawa) or dividing a block based on contents of said information elements (column 10, lines 45-46, Ishikawa); and a process of merging the block structures based on information contained in each block (see Figure 5, all features and column 10, lines 44-45, wherein a single keyword is input to the text box or a plurality of keywords divided by spaces, Ishikawa).

#### **Prior Art of Record**

1. Ishikawa et al (US Patent No. 5,848,407) discloses a hypertext document and anchor sentences of parent documents for the hypertext document are registered with an hypertext document identifier as document information for each of hypertext documents having reference relationships with each other.

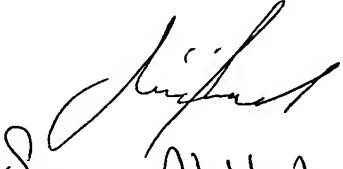
#### **Point of Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene R. Rose whose telephone number is (571) 272-0749. The examiner can normally be reached on 8:00am - 4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helene R Rose  
Technology Center 2100  
December 23, 2005



Sana Al-Hashemi